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**Technology Center 2100**

**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application Number: 09/697,562
Filing Date: October 26, 2000
Appellant(s): BUSH ET AL.

Patrick S. Yoder
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed February 13, 2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

| | | |
|---|---|---|
| **6,570,876** | **Aimoto** | **5-2003** |
| **6,324,570** | **Tonchev et al** | **11-2001** |

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 10, the term “may be” on line 2 makes the claim being indefinite. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-6, 9 and 11-14 are rejected under 35 U.S.C. § 102(e) as being anticipated by Aimoto U.S. Pat. No. 6,570,876.

Regarding claim 1, Aimoto teaches a communications network (= packet switching network) [see Col. 1, Lines 8-16] comprising:

at least one source unit configured to generate messages for relay (= incoming packets from the network via input port IN) [see Fig. 1 and Col. 5, Lines 23-29];

a smart node (= switch (1)) capable of storing programming instructions (= packet queuing algorithm and command) [see Abstract and Col. 3, Lines 59-64 and Col. 6, Lines 59-64], receiving messages for relay from said source unit (= receiving packets incoming from the network by the packet receiving unit (2) and storing packets in buffer memory (72) by the relaying priority control unit (3) and transferring packets to the packet relaying unit (4) according to priority) [see Fig. 1 and Col. 5, Lines 23-30],

determining at least a merit value for said received messages (= determining priority value in the header of the packet) [see Fig. 3 and Col. 5, Lines 42-58], dynamically reprioritizing the received messages for relay based upon said merit value (= the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group) [Col. 6, Lines 1-10 and Col. 6, Lines 15-22], and transmitting the reprioritized received messages (= the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT) [see Col. 6, Lines 35-39]; and

at least one portal node adapted to receive said reprioritized received messages transmitted from said smart node (= the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT connected to a network [see Figs. 1-2 and Col. 5, Lines 31-41 and Col. 6, Lines 35-39]. This suggests that the reprioritized packets are transmitted out of the switch to another node (next/destination node) in the network).

Regarding claim 2, Aimoto further teaches said smart node comprises an electronic computer for executing said programming instructions (= a network manager can change the packet queuing algorithm by issuing a command from the management terminal PT (16Cn)) [see Figs. 1-2 and Col. 6, Lines 59-64 and Col. 7, Lines 23-30].

Regarding claim 3, Aimoto further teaches said programming instructions comprise active messages (= control command for changing packet queuing algorithm) [see Col. 6, Lines 59-64 and Col. 7, Lines 23-30].

Regarding claim 4, Aimoto teaches a communications network (= packet switching network) [see Col. 1, Lines 8-16] comprising:

at least one source unit configured to generate messages for relay (= incoming packets from the network via input port IN) [see Fig. 1 and Col. 5, Lines 23-29];

a smart node (= switch (1)) capable of receiving programming instructions and storing said programming instructions (= packet queuing algorithm and command) [see Abstract and Col. 3, Lines 59-64 and Col. 6, Lines 59-64], receiving messages for relay from said source unit and storing the received messages for relay in a queue (= receiving packets incoming from the network by the packet receiving unit (2) and storing packets in buffer memory (72) by the relaying priority control unit (3) and transferring packets to the packet relaying unit (4) according to priority) [see Fig. 1 and Col. 5, Lines 23-30], determining at least a merit value for said received messages (= determining priority value in the header of the packet) [see Fig. 3 and Col. 5, Lines 42-58], and dynamically reprioritizing the received messages for relay in said queue based upon said merit value (= the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group) [Col. 6, Lines 1-26];

at least one portal node adapted to receive said retransmitted received messages from said at least one smart node for relay (= the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT connected to a network [see Figs. 1-2 and Col. 5, Lines 31-41 and Col. 6, Lines 35-39]. This suggests that the reprioritized packets are transmitted out of the switch to another node (next/destination node) in the network); and

at least one communications node adapted to send said programming instructions to said smart node (= management terminal PT (16Cn) issuing a command via management unit (9) for changing packet queuing algorithm) [see Figs. 1-2 and Col. 6, Lines 59-64 and Col. 7, Lines 23-30].

Regarding claim 5, Aimoto further teaches said smart node comprises:

a message storage queue (= a plurality of queues (83)) [see Fig. 1 and Col. 6, Lines 11-26];

a transmitter (= packet transmission unit (6)) [see Fig. 1 and Col. 6, Lines 35-39];

a receiver (= packet receiving unit (2)) [see Fig. 1 and Col. 5, Lines 23-30];

a queue controller for writing messages received at said smart node into said message storage queue (= relaying priority control unit (3) for storing the packets in the buffer memory (72) with a plurality of queues (Q1 to Qn) and transferring to the packet relaying unit (4) before sending packets to a plurality of queues (Q10 to Q1n) ... (Qj0 to Qjn)) [see Fig. 1 and Col. 5, Lines 23-30 and Col. 6, Lines 11-26] and for removing messages from said message storage queue for relay transmission by said transmitter

(= packet read out circuits ((81) & (82)) for reading out packets from the queues and forwarding to the packet transmission unit (6) to output port) [see Fig. 1 and Col. 6, Lines 28-39]; and

a dynamic reprioritization controller (= transmission priority control unit (5)) for specifying an order of transmission of said removed message for relay transmission by said transmitter (= the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups based on the header information of each of those packets and queuing those packets according to the priority for each group) [Col. 6, Lines 1-10 and Col. 6, Lines 15-22].

Regarding claim 6, Aimoto further teaches at least one receiver for receiving said messages for relay from said source unit (= packet receiving unit (2) for receiving incoming packets from the network via input port IN) [see Fig. 1 and Col. 5, Lines 23-29].

Regarding claim 9, Aimoto teaches a method for dynamic reprioritizing messages, comprising:

receiving messages from a source unit and storing said received messages in a buffer unit (= receiving packets incoming from the network by the packet receiving unit (2) and storing packets in buffer memory (72) by the relaying priority control unit (3) and

transferring packets to the packet relaying unit (4) according to priority) [see Fig. 1 and Col. 5, Lines 23-30];

determining at least a merit value for said received messages (= determining priority value in the header of the packet) [see Fig. 3 and Col. 5, Lines 42-58], and reprioritizing the received messages for relay in said queue based upon said merit value (= the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group) [Col. 6, Lines 1-26]; and

transmitting the reprioritized received messages (= the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT) [see Col. 6, Lines 35-39].

Regarding claim 11, Aimoto further teaches said received messages are stored in a queue (= queues (83)) [see Fig. 1 and Col. 6, Lines 11-26].

Regarding claim 12, Aimoto further teaches a smart node (= switch (1)) reprioritizes said received messages (= the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group) [Col. 6, Lines 1-10 and Col. 6, Lines 15-22].

Regarding claim 13, Aimoto further teaches said smart node transmits said reprioritized received messages (= the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT) [see Col. 6, Lines 35-39].

Regarding claim 14, Aimoto further teaches said smart node receives programmable instructions from a communication node (= management terminal PT (16Cn) issuing a command via management unit (9) for changing packet queuing algorithm) [see Figs. 1-2 and Col. 6, Lines 59-64 and Col. 7, Lines 23-30].

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 7-8 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Aimoto, U.S. Pat. No. 6,570,876 in view of Tonchev et al (Hereafter, Tonchev), U.S. Pat. No. 6,324,570.

Regarding claim 7, Aimoto does not explicitly teach said merit value for said received messages is determined heuristically. However, Tonchev, in the same field of prioritized transferring of data packet endeavor, discloses utilization of prioritization heuristic in determining the priority value [see Tonchev, Abstract]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Tonchev in the system of Aimoto in order to assure that data will be delivered on time to the destination while minimizing overall waiting time [see Tonchev, Col. 3, Lines 9-11].

Claims 8 and 10 are rejected under the same rationale set forth above to claim 7.

**(10) Response to Argument**

A. Introduction:

Aimoto discloses packet switch and switching method for switching variable length packets. A packet switch for switching variable length packets, wherein each of output port interfaces includes a buffer memory for storing transmission packets, a transmission priority controller for classifying, based on a predetermined algorithm, transmission packets passed from a packet switching unit into a plurality of queue groups top which individual bandwidths are assigned respectively, and queuing said transmission packets in said buffer memory so as to form a plurality of queues according to transmission priority in each of said queue groups, and a packet read-out controller for reading out said transmission packets from each of said queue groups in the buffer memory according to the order of transmission priority of the packets while guaranteeing the bandwidth assigned to the queue group [see Aimoto, Abstract].

Aimoto further teaches a communications network such as packet switching network [see Aimoto, Col. 1, Lines 8-16] comprising at least one source unit configured to generate messages for relay. That is, incoming packets from the network via input port IN [see Aimoto, Fig. 1 and Col. 5, Lines 23-29]. Also, Aimoto further teaches a smart node such as switch (1) capable of storing programming instructions. For example, Aimoto discloses packet queuing algorithm and command [see Aimoto, Abstract and Col. 3, Lines 59-64 and Col. 6, Lines 59-64].

In addition, Aimoto further teaches receiving messages for relay from said source unit. For example, Aimoto discloses receiving packets incoming from the network by the

packet receiving unit (2) and storing packets in buffer memory (72) by the relaying priority control unit (3) and transferring packets to the packet relaying unit (4) according to priority [see Aimoto, Fig. 1 and Col. 5, Lines 23-30].

Moreover, Aimoto further teaches determining at least a merit value for said received messages. For example, Aimoto discloses determining priority value as merit value in the header of the packet [see Aimoto, Fig. 3 and Col. 5, Lines 42-58]. Also, Aimoto further teaches dynamically reprioritizing the received messages for relay based upon said merit value. That is, the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group [see Aimoto, Col. 6, Lines 1-10 and Col. 6, Lines 15-22].

Then, Aimoto further teaches transmitting the reprioritized received messages. For example, Aimoto discloses the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT [see Aimoto, Col. 6, Lines 35-39].

Last but not least, Aimoto further teaches at least one portal node adapted to receive said reprioritized received messages transmitted from said smart node. For example, Aimoto discloses the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT connected to a network [see Aimoto, Figs. 1-2 and Col. 5, Lines 31-41 and Col. 6, Lines 35-39]. This suggests that the reprioritized packets are transmitted out of the switch to another node (next/destination node) in the network.

**B. Issue 1: Regarding 35 U.S.C. §112 second paragraph rejection of claim 10, Page 6 of the Appeal Brief is directed to this claim.**

Amendments after the Final Office Action for claim 10 will be entered to overcome only the rejection under 35 U.S.C. §112 second paragraph. Therefore, appellant's argument is moot.

**C. Issue 2: Regarding claim 1 and the claims depending therefrom. Pages 6-9 of the Appeal Brief are directed to these claims.**

**Appellant argued that the packet switch disclosed by Aimoto (U.S. Pat. No. 6,570,876) is inherently different from the communications network recited by claim 1 because the claimed smart node determines the merit value after receipt of the messages from the source, and dynamically reprioritizes the message based on the determined merit value. This determining of a merit value, and subsequent reprioritization is simply not taught by Aimoto.**

Examiner respectfully disagrees. Appellant argues about definition of "merit value" as defined in the specification of the instant application and quoted section of the specification (Page 4, Line 25 through Page 5, Line 16) wherein the "merit value" is defined as being inversely proportional to the position dilution of precesion (PDOP) and PDOP is further defined as the calculus of choice for comparing the relative merits of individual position estimates of individual target location estimates. *In response to appellant's arguments, the law of anticipation requires that a distinction be made*

*between the invention described or taught and the invention claimed. It does not require that the reference "teach" what the subject patent teaches. Assuming that a reference is properly "prior art," it is only necessary that the claims under consideration "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it.* **See Colman v. Kimberly-Clark Corp., 218 USPO 789.** *In addition, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.* **See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).**

Regarding claim 1, based on the broadest reasonable interpretation within the scope of the art, Aimoto teaches a communications network such as packet switching network [see Aimoto, Col. 1, Lines 8-16] comprising at least one source unit configured to generate messages for relay. That is, incoming packets from the network via input port IN [see Aimoto, Fig. 1 and Col. 5, Lines 23-29]. Also, Aimoto further teaches a smart node such as switch (1) capable of storing programming instructions. For example, Aimoto discloses packet queuing algorithm and command [see Aimoto, Abstract and Col. 3, Lines 59-64 and Col. 6, Lines 59-64].

In addition, Aimoto further teaches receiving messages for relay from said source unit. For example, Aimoto discloses receiving packets incoming from the network by the packet receiving unit (2) and storing packets in buffer memory (72) by the relaying priority control unit (3) and transferring packets to the packet relaying unit (4) according to priority [see Aimoto, Fig. 1 and Col. 5, Lines 23-30].

Moreover, Aimoto further teaches determining at least a merit value for said received messages. For example, Aimoto discloses determining priority value as merit value in the header of the packet [see Aimoto, Fig. 3 and Col. 5, Lines 42-58]. Also, Aimoto further teaches dynamically reprioritizing the received messages for relay based upon said merit value. That is, the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group [see Aimoto, Col. 6, Lines 1-10 and Col. 6, Lines 15-22].

Then, Aimoto further teaches transmitting the reprioritized received messages. For example, Aimoto discloses the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT [see Aimoto, Col. 6, Lines 35-39].

Last but not least, Aimoto further teaches at least one portal node adapted to receive said reprioritized received messages transmitted from said smart node. For example, Aimoto discloses the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT connected to a network [see Aimoto, Figs. 1-2 and Col. 5, Lines 31-41 and Col. 6, Lines 35-39]. This suggests that the reprioritized packets are transmitted out of the switch to another node (next/destination node) in the network.

In summary, Aimoto discloses a packet comprises a header portion and data portion wherein the header portion includes packet priority information as merit value in the header of the packet [see Aimoto, Fig. 3 and Col. 5, Lines 42-58]. Also, Aimoto

further teaches dynamically reprioritizing the received messages for relay based upon said merit value. That is, the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group [see Aimoto, Col. 6, Lines 1-10 and Col. 6, Lines 15-22]. This suggests that packets (or messages) are classified (or determined) and queued for outputting to another node based on the priority (or merit value) after receipt of the packets (or messages) from the input (or source node) as claimed and argued by appellant.

Since claims 2-3 and 7 are dependent on claim 1, claims 2-3 and 7 are not patentable at least for the reasons set forth above to claim 1 with the teaching of Aimoto (U.S. Pat. No. 6,570,876) or by other reasons with the teaching of combination of Aimoto (U.S. Pat. No. 6,570,876) and Tonchev et al (U.S. Pat. No. 6,324,570). Therefore, claims 1-3 and 7 remain/stand rejected as shown above.

**D. Issue 3: Regarding claims 4 and 9 and the claims depending therefrom. Pages 9-10 of the Appeal Brief are directed to these claims.**

**Appellant argued that claims 4 and 9 (as a method) each recite, in generally similar language, same merit value determination and reprioritization as claim 1 discussed above. Aimoto (U.S. Pat. No. 6,570,876) simply cannot anticipate claim 4 or claim 9.**

Examiner respectfully disagrees. Claim 4 (a communication network claim) maybe recite, in generally similar language, same merit value determination and reprioritization as claim 1 discussed above. However, claim 9 (as a method claim) is broader than claim 1 or claim 4. Claim 9 does not even recite "which node is receiving messages, where the reprioritized received messages are transmitted to, and **dynamically** reprioritizing messages" as claimed in claim 1 and claim 4.

Regarding claim 4, based on the broadest reasonable interpretation within the scope of the art, Aimoto teaches a communications network such as packet switching network [see Aimoto, Col. 1, Lines 8-16] comprising at least one source unit configured to generate messages for relay. That is, incoming packets from the network via input port IN [see Aimoto, Fig. 1 and Col. 5, Lines 23-29]. Also, Aimoto further teaches a smart node such as switch (1) capable of receiving programming instructions and storing said programming instructions. For example, Aimoto discloses packet queuing algorithm and command [see Aimoto, Abstract and Col. 3, Lines 59-64 and Col. 6, Lines 59-64].

In addition, Aimoto further teaches receiving messages for relay from said source unit and storing the received messages for relay in a queue. For example, Aimoto discloses receiving packets incoming from the network by the packet receiving unit (2) and storing packets in buffer memory (72) by the relaying priority control unit (3) and transferring packets to the packet relaying unit (4) according to priority [see Aimoto, Fig. 1 and Col. 5, Lines 23-30].

Moreover, Aimoto further teaches determining at least a merit value for said received messages. For example, Aimoto discloses determining priority value in the header of the packet [see Aimoto, Fig. 3 and Col. 5, Lines 42-58]. Also, Aimoto further teaches dynamically reprioritizing the received messages for relay in said queue based upon said merit value. That is, the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group [see Aimoto, Col. 6, Lines 1-26].

Then, Aimoto further teaches at least one portal node adapted to receive said retransmitted received messages from said at least one smart node for relay. For example, Aimoto discloses the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT connected to a network [see Aimoto, Figs. 1-2 and Col. 5, Lines 31-41 and Col. 6, Lines 35-39]. This suggests that the reprioritized packets are transmitted out of the switch to another node (next/destination node) in the network.

Last but not least, Aimoto further teaches at least one communications node adapted to send said programming instructions to said smart node. For example, Aimoto discloses management terminal PT (16Cn) issuing a command via management unit (9) for changing packet queuing algorithm [see Aimoto, Figs. 1-2 and Col. 6, Lines 59-64 and Col. 7, Lines 23-30].

In summary, Aimoto discloses a packet comprises a header portion and data portion wherein the header portion includes packet priority information as merit value in

the header of the packet [see Aimoto, Fig. 3 and Col. 5, Lines 42-58]. Also, Aimoto further teaches dynamically reprioritizing the received messages for relay based upon said merit value. That is, the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group [see Aimoto, Col. 6, Lines 1-10 and Col. 6, Lines 15-22]. This suggests that packets (or messages) are classified (or determined) and queued for outputting to another node based on the priority (or merit value) after receipt of the packets (or messages) from the input (or source node) as claimed and argued by appellant.

Regarding claim 9, based on the broadest reasonable interpretation within the scope of the art, Aimoto teaches a method for dynamic reprioritizing messages, comprising receiving messages from a source unit and storing said received messages in a buffer unit. That is, receiving packets incoming from the network by the packet receiving unit (2) and storing packets in buffer memory (72) by the relaying priority control unit (3) and transferring packets to the packet relaying unit (4) according to priority [see Aimoto, Fig. 1 and Col. 5, Lines 23-30].

In addition, Aimoto further teaches determining at least a merit value for said received messages. For example, Aimoto discloses determining priority value in the header of the packet [see Aimoto, Fig. 3 and Col. 5, Lines 42-58]. Also, Aimoto further teaches reprioritizing the received messages for relay in said queue based upon said

merit value. That is, the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group [See Aimoto, Col. 6, Lines 1-26].

Last but not least, Aimoto further teaches transmitting the reprioritized received messages. For example, Aimoto discloses the packet transmission unit (6) transmits packets received from the read-out circuit (81) of the queues (83) to an output port OUT [see Aimoto, Col. 6, Lines 35-39].

In summary, Aimoto again discloses a packet comprises a header portion and data portion wherein the header portion includes packet priority information as merit value in the header of the packet [see Aimoto, Fig. 3 and Col. 5, Lines 42-58]. Also, Aimoto further teaches dynamically reprioritizing the received messages for relay based upon said merit value. That is, the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group [see Aimoto, Col. 6, Lines 1-10 and Col. 6, Lines 15-22]. This suggests that packets (or messages) are classified (or determined) and queued for outputting to another node based on the priority (or merit value) after receipt of the packets (or messages) from the input (or source node) as claimed and argued by appellant.

Since claims 5-6, 8 and 10-14 are dependent on independent claims 4 and 9, claims 5-6, 8 and 10-14 are not patentable at least for the reasons set forth above to claims 4 and 9 with the teaching of Aimoto (U.S. Pat. No. 6,570,876) or by other reasons with the teaching of combination of Aimoto (U.S. Pat. No. 6,570,876) and Tonchev et al (U.S. Pat. No. 6,324,570). Therefore, claims 4-6 and 8-14 remain/stand rejected as shown above.

**E. Issue 4: Regarding claims 7-8 and 10, page 10 of the Appeal Brief is directed to these claims.**

**Appellant argued that Tonchev et al (U.S. Pat. No. 6,324,570) does not describe or even suggest determination of a merit value or reprioritization based upon such a value, and so can not obviate the deficiencies of Aimoto (U.S. Pat. No. 6,570,876) discussed above.**

Examiner respectfully disagrees. *In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.* See ***In re Keller*, 642F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck* & Co., 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986)**. Applicant obviously attacks references individually without taking into consideration based on the teaching of combinations of references as shown above. With respect to Tonchev, appellant seems to argue points

the examiner has already construed Aimoto does teach while restricting the arguments on the Aimoto-Tonchev combined to arguments of no motivation.

Regarding claims 7-8 and 10, based on the broadest reasonable interpretation within the scope of the art, Aimoto again discloses a packet comprises a header portion and data portion wherein the header portion includes packet priority information as merit value in the header of the packet [see Aimoto, Fig. 3 and Col. 5, Lines 42-58]. Also, Aimoto further teaches dynamically reprioritizing the received messages for relay based upon said merit value. That is, the transmission priority control unit (5) performs storing packets received from the relaying unit in a transmission buffer memory (83) and classifying packets into a plurality of groups and queuing those packets according to the priority for each group [see Aimoto, Col. 6, Lines 1-10 and Col. 6, Lines 15-22]. This suggests that packets (or messages) are classified (or determined) and queued for outputting to another node based on the priority (or merit value) after receipt of the packets (or messages) from the input (or source node) as claimed and argued by appellant.

On the other hand, Aimoto does not explicitly teach said merit value for said received messages is determined heuristically. However, Tonchev, in the same field of prioritized transferring of data packet endeavor, discloses utilization of prioritization heuristic in determining the priority value [see Tonchev, Abstract]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Tonchev in the system of Aimoto in order to assure that data

will be delivered on time to the destination while minimizing overall waiting time [see Tonchev, Col. 3, Lines 9-11].

In summary, the references can and should be combined in the manner noted in the Rejection shown above. Therefore, claims 7-8 and 10 remain/stand rejected as shown above.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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